

Serial Number: 09/8,000

CRF Processing Date: 5/21/2001  
 Edited by: [Signature]  
 Verified by: [Signature] (STIC staff)

**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☒ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: 1
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☒ Other: Seqs 38, 58, 148 - deleted nos. under stop codons

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

PCT

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001  
TIME: 08:37:41

Does Not Comply  
Corrected Diskette Needed

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Output Set: N:\CRF3\05212001\I831000.raw

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5 <120> TITLE OF INVENTION: Cloning of Rhadinovirus Genome and Methods for its Use  
7 <130> FILE REFERENCE: 53683  
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/831,000  
C--> 10 <141> CURRENT FILING DATE: 2001-05-02  
12 <150> PRIOR APPLICATION NUMBER: 60/107,507  
13 <151> PRIOR FILING DATE: 1998-11-06  
15 <150> PRIOR APPLICATION NUMBER: 60/109,409  
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18 <160> NUMBER OF SEQ ID NOS: 179  
20 <170> SOFTWARE: PatentIn Ver. 2.1

# ERRORED SEQUENCES

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PP. 24,32,42

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

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## RAW SEQUENCE LISTING

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DATE: 05/21/2001

TIME: 08:37:42

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

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228 ggcatagtaa acacctacac ggacagggac ttactaacc agaccgtgt tctgcaaccg 12060
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249 agcaacgtaa cctactacta caaagactac gtcttcgtga aaaaaattaa cacctccgag 13320
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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298 accggggtgg ccagcggcct cctcccatgc attaacatag cggaaccgt gacgtcccg 16260
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

DATE: 05/21/2001

PATENT APPLICATION: US/09/831,000

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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623 gataattttc atatccatta tttgtgttta atgaacaacg gtaccgttgt ggaaattcgg 35760
624 ggattgtaca gaagacacgc actcagtgtt attgcattag tatttgcttt tattggaaca 35820
625 atgtctgtct tgtattttct gtttaagctg ttttccatcc tggcctaaac tgtaataaaa 35880
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632 taaagtgaac acagaatatt ttccaaaccc aaacgctgca ataggacgtg ctttaaaaaa 36300
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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PATENT APPLICATION: US/09/831,000

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

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Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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837 gagggcgatt tgttttagg agccaagcag aatgcgtttg tcgattctat agaaaagacg 48600
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

DATE: 05/21/2001

PATENT APPLICATION: US/09/831,000

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

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DATE: 05/21/2001

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Input Set : A:\53683 seq listing.txt

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Input Set : A:\53683 seq listing.txt

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Input Set : A:\53683 seq listing.txt

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

DATE: 05/21/2001

PATENT APPLICATION: US/09/831,000

TIME: 08:37:42

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

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DATE: 05/21/2001

TIME: 08:37:42

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

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Output Set: N:\CRF3\05212001\I831000.raw

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92760

## RAW SEQUENCE LISTING

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DATE: 05/21/2001

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## RAW SEQUENCE LISTING

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:42

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Output Set: N:\CRF3\05212001\I831000.raw

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

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DATE: 05/21/2001

TIME: 08:37:42

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## RAW SEQUENCE LISTING

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## RAW SEQUENCE LISTING

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

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Output Set: N:\CRF3\05212001\I831000.raw

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## RAW SEQUENCE LISTING

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Output Set: N:\CRF3\05212001\I831000.raw

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Output Set: N:\CRF3\05212001\I831000.raw

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2238 ggcccgccgc actcccgga ggcggccggt ccggccgagc ccggcgccgc cgcgccccga 132660  
2239 cgcccccgcc gcccggggcc ccacaagcgg cggcgcgccg ctcccgatgc cggcgccgcg 132720  
2240 ccggcccgca tggcggtcct ccggcgccgc cccctcccc acgcccgcgc gaaaggtggt 132780  
2241 ctccgcccgc ccgggagggg ggcgggggccc ccggggcgcc ccggcggggc ccggcgccggg 132840  
2242 cgcgaccgag ggccccggga gaacggggga tcgggaaaac gcgaggggag cgggggacag 132900  
2243 gggacggcgt gtgctgtctt gtgagacacc ggtacgggt cctgcctgc tcgctggcct 132960  
2244 gcttgcctgag gggacagtag gcctgcttgc tcgctggcct gcttgcctgag gggacagtag 133020  
2245 gcctgcttgc tgaggggaca gtaggcctgc ttgctcgtg gcctgcttgc tgaggggaca 133080  
2246 gtagggctgc tggcttgcta gtagggctgc tcgctggcct gcttgccttgc tcgctggcct 133140  
2247 gcttgccttgc tcgctggcct gcttgccttgc tcgctggcct gcttgccttgc tcgctggcct 133200  
2248 gcttgccttgc tcgctggcct gcttgccttgc tcgctggcct gcttgccttgc tcgctggcct 133260  
2249 gcttgcctgag gggacagtag ggctgcttgc ttgctaagg gacggtacgc ctgcctgatg 133320  
2250 gcttgatagt agggctgctg ggctgctagt agggctgctg ggctgctagt agggctgctg 133380  
2251 ggctgctagt agggctgctg ggctgctagt agggctcctg ggctgctagt agggctgctg 133440  
2252 ggctgctagt agggctcctg ggctgctagt agggctgctg ggctgctagt agggctgctg 133500  
2253 ggctgctagt agggctgctg ggctgctagt agggctgctg gctggcctgc ttgcttgcct 133560  
2254 gctagtgggg ccgcttgctt gctactaggg ctgctgtgca gctgggagaa cagagtaggg 133620  
2255 ctgccggcca gctgcgtgcg agggcgtccg agggccagac gaggacacgg gacccgggccc 133680  
2256 tctccccgc ccgaccgcc gggaccccg cccagatct 133719

5987 &lt;210&gt; SEQ ID NO: 38

5988 &lt;211&gt; LENGTH: 2115

5989 &lt;212&gt; TYPE: DNA

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:43

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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5990 <213> ORGANISM: Macaca mulatta rhadinovirus 17577
5992 <220> FEATURE:
5993 <221> NAME/KEY: CDS
5994 <222> LOCATION: (1)..(2115)
5996 <400> SEQUENCE: 38
5997 atg gcg cgt att agt ttt ata ttt ttt ttt act ata ata agg tgt tct 48
5998 Met Ala Arg Ile Ser Phe Ile Phe Phe Phe Thr Ile Ile Arg Cys Ser
5999 1 5 10 15
6001 gta acg gac aaa tac gtg tat gat gaa aaa tca aat gta gag ttg gaa 96
6002 Val Thr Asp Lys Tyr Val Tyr Asp Glu Lys Ser Asn Val Glu Leu Glu
6003 20 25 30
6005 ttt aat gga aca att tac caa att aat tgg aga aac gta agc aaa gaa 144
6006 Phe Asn Gly Thr Ile Tyr Gln Ile Asn Trp Arg Asn Val Ser Lys Glu
6007 35 40 45
6009 tta aca tct att gta atg gaa gat gcg tgg tac gat tct tta ctg ctg 192
6010 Leu Thr Ser Ile Val Met Glu Asp Ala Trp Tyr Asp Ser Leu Leu Leu
6011 50 55 60
6013 gaa cca ttg tct gtg act ttg gaa aaa aga aaa agt ttg ctg cga tca 240
6014 Glu Pro Leu Ser Val Thr Leu Glu Lys Arg Lys Ser Leu Leu Arg Ser
6015 65 70 75 80
6017 agt ata gtt aat gtg cat aat aat gac tat aca ttt tgt aaa tct tca 288
6018 Ser Ile Val Asn Val His Asn Asn Asp Tyr Thr Phe Cys Lys Ser Ser
6019 85 90 95
6021 agt gac cat gta att aac ctt acg gtg gat ttt aat tac agt tct ttg 336
6022 Ser Asp His Val Ile Asn Leu Thr Val Asp Phe Asn Tyr Ser Ser Leu
6023 100 105 110
6025 cca ggt ttt act ggg aat ttt aat gta atg aca cat gct tta aca caa 384
6026 Pro Gly Phe Thr Gly Asn Phe Asn Val Met Thr His Ala Leu Thr Gln
6027 115 120 125
6029 ggc gtt tta tta acg aaa cgt gaa tta ttt acc aac tca aca aac att 432
6030 Gly Val Leu Leu Thr Lys Arg Glu Leu Phe Thr Asn Ser Thr Asn Ile
6031 130 135 140
6033 atg gat ctt ttt tac gcg gaa aaa ata aat gca gaa atg ttc aag att 480
6034 Met Asp Leu Phe Tyr Ala Glu Lys Ile Asn Ala Glu Met Phe Lys Ile
6035 145 150 155 160
6037 act ttt gat tat tcc aat gta ata att tcc ggc att ata aca gaa aat 528
6038 Thr Phe Asp Tyr Ser Asn Val Ile Ile Ser Gly Ile Ile Thr Glu Asn
6039 165 170 175
6041 tgg ata tta gta tca gtt aca aat tca agt gta aaa tca aat atg caa 576
6042 Trp Ile Leu Val Ser Val Thr Asn Ser Ser Val Lys Ser Asn Met Gln
6043 180 185 190
6045 tgt gtt gca ctg ttg ttt ggt gtt cct agc aca ttt cca gcg tta aaa 624
6046 Cys Val Ala Leu Leu Phe Gly Val Pro Ser Thr Phe Pro Ala Leu Lys
6047 195 200 205
6049 ggc tat gta tct tat cgt gat tta ttg gtc gtt aaa aat tca aac tat 672
6050 Gly Tyr Val Ser Tyr Arg Asp Leu Leu Val Val Lys Asn Ser Asn Tyr
6051 210 215 220
6053 gct ctg ggt gta att gcg ccg aaa tct tat aat act ctt gat ttg gca 720
6054 Ala Leu Gly Val Ile Ala Pro Lys Ser Tyr Asn Thr Leu Asp Leu Ala

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:43

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

6055	225		230		235		240		
6057	ttt	tta	cca	aaa	aat	ttt	aca	gaa	atg
6058	Phe	Leu	Pro	Lys	Asn	Phe	Thr	Glu	Met
6059				245		250			
6061	ccg	ctt	aat	gcc	att	gat	tat	ctc	aaa
6062	Pro	Leu	Asn	Ala	Ile	Asp	Tyr	Leu	Lys
6063				260				265	
6065	gca	aag	ggt	gcc	tgt	caa	aat	cct	tca
6066	Ala	Lys	Gly	Ala	Cys	Gln	Asn	Pro	Ser
6067				275				280	
6069	ttc	ttt	ttt	gaa	gtt	act	gca	gta	aat
6070	Phe	Phe	Phe	Glu	Val	Thr	Ala	Val	Asn
6071				290				295	
6073	caa	aag	cag	caa	tta	gtt	aac	gtt	ggg
6074	Gln	Lys	Gln	Gln	Leu	Val	Asn	Val	Gly
6075	305				310			315	
6077	gcg	tta	gaa	agt	tta	atg	cat	tta	tta
6078	Ala	Leu	Glu	Ser	Leu	Met	His	Leu	Leu
6079				325				330	
6081	aag	tta	tat	gag	cta	aat	ttg	gaa	acg
6082	Lys	Leu	Tyr	Glu	Leu	Asn	Leu	Glu	Thr
6083				340				345	
6085	cag	gtt	ttt	aac	ttg	ccg	gca	aat	agc
6086	Gln	Val	Phe	Asn	Leu	Pro	Ala	Asn	Ser
6087				355				360	
6089	gat	caa	gag	gtc	gta	ttt	tca	atg	ttt
6090	Asp	Gln	Glu	Val	Val	Phe	Ser	Met	Phe
6091				370				375	
6093	aag	gtt	ggt	ggt	aaa	att	cta	aac	gaa
6094	Lys	Val	Gly	Gly	Lys	Ile	Leu	Asn	Glu
6095	385				390			395	
6097	atg	tac	acc	aaa	tac	agt	gaa	aat	tat
6098	Met	Tyr	Thr	Lys	Tyr	Ser	Glu	Asn	Tyr
6099				405				410	
6101	cgg	aat	gta	atg	aac	atg	tat	gaa	gtt
6102	Arg	Asn	Val	Met	Asn	Met	Tyr	Glu	Val
6103				420				425	
6105	gtc	aca	gat	tct	tct	gtg	ttt	tat	ccg
6106	Val	Thr	Asp	Ser	Ser	Val	Phe	Tyr	Pro
6107				435				440	
6109	tgt	aat	aat	gta	gag	ata	tca	tat	atg
6110	Cys	Asn	Asn	Val	Glu	Ile	Ser	Tyr	Met
6111				450				455	
6113	gat	gac	atc	acc	ata	ttt	cgc	gtg	ttt
6114	Asp	Asp	Ile	Thr	Ile	Phe	Arg	Val	Phe
6115	465				470			475	
6117	agg	ttt	gat	tta	gat	gaa	aac	aag	cta
6118	Arg	Phe	Asp	Leu	Asp	Glu	Asn	Lys	Leu
6119				485				490	
									495

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:43

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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6121 tca aaa aga acc ggc tcg gaa ctg gca caa gga gcg tct ggt ttt tgg 1536
6122 Ser Lys Arg Thr Gly Ser Glu Leu Ala Gln Gly Ala Ser Gly Phe Trp
6123          500          505          510
6125 cgg ctg ttg cac gct ttt cac gcc acg cgt ata aac gag ttt tca gtc 1584
6126 Arg Leu Leu His Ala Phe His Ala Thr Arg Ile Asn Glu Phe Ser Val
6127          515          520          525
6129 ata aat tgt acc agg ctg gca tgg aag caa gta acc gcg ctg atg ccg 1632
6130 Ile Asn Cys Thr Arg Leu Ala Trp Lys Gln Val Thr Ala Leu Met Pro
6131          530          535          540
6133 ctt acg aac atc acg tac gtc ata agc tcc gtg cgc cct gat cac gct 1680
6134 Leu Thr Asn Ile Thr Tyr Val Ile Ser Ser Val Arg Pro Asp His Ala
6135 545.          550          555          560
6137 cgc gtt tac gag gtt tcg gag gtg ttc ctt aac agc gcg atg ttt gtc 1728
6138 Arg Val Tyr Glu Val Ser Glu Val Phe Leu Asn Ser Ala Met Phe Val
6139          565          570          575
6141 tcg gcc gtt tat cca aat tgt tct cat ttt aca ccg ccc ggt acc gcc 1776
6142 Ser Ala Val Tyr Pro Asn Cys Ser His Phe Thr Pro Pro Gly Thr Ala
6143          580          585          590
6145 cta cac att ccg ata ttg tat aac ttt tcc gcc ccg agg ata gga tgt 1824
6146 Leu His Ile Pro Ile Leu Tyr Asn Phe Ser Ala Pro Arg Ile Gly Cys
6147          595          600          605
6149 ccg ctg tgt gat tcg att gtt ttg agc tat gat gag aac cag gga cta 1872
6150 Pro Leu Cys Asp Ser Ile Val Leu Ser Tyr Asp Glu Asn Gln Gly Leu
6151          610          615          620
6153 cag acc atg atg tac gtg tca aac ccc aca gtt caa gcc aac ctg ttt 1920
6154 Gln Thr Met Met Tyr Val Ser Asn Pro Thr Val Gln Ala Asn Leu Phe
6155 625          630          635          640
6157 tcc ccg tat tct cct ttc ttt gac aac gat aat ttt cat atc cat tat 1968
6158 Ser Pro Tyr Ser Pro Phe Phe Asp Asn Asp Asn Phe His Ile His Tyr
6159          645          650          655
6161 ttg tgg tta atg aac aac ggt acc gtt gtg gaa att cgg gga ttg tac 2016
6162 Leu Trp Leu Met Asn Asn Gly Thr Val Val Glu Ile Arg Gly Leu Tyr
6163          660          665          670
6165 aga aga cac gca ctc agt gct att gca tta gta ttt gct ttt att gga 2064
6166 Arg Arg His Ala Leu Ser Ala Ile Ala Leu Val Phe Ala Phe Ile Gly
6167          675          680          685
6169 aca atg tct gct ctg tat ttt ctg ttt aag ctg ttt tcc atc ctg gcc 2112
6170 Thr Met Ser Ala Leu Tyr Phe Leu Phe Lys Leu Phe Ser Ile Leu Ala
6171          690          695          700
6173 taa 2115

```

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E--> 6175 705
7909 <210> SEQ ID NO: 58
7910 <211> LENGTH: 1395
7911 <212> TYPE: DNA
7912 <213> ORGANISM: Macaca mulatta rhadinovirus 17577
7914 <220> FEATURE:
7915 <221> NAME/KEY: CDS
7916 <222> LOCATION: (1)..(1395)
7918 <400> SEQUENCE: 58

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:43

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

7919	atg	gat	gcg	cat	ggt	ctc	aac	cgg	cga	tcc	gtc	gcg	ggt	cag	tgc	gac	48
7920	Met	Asp	Ala	His	Gly	Leu	Asn	Arg	Arg	Ser	Val	Ala	Gly	Gln	Cys	Asp	
7921	1				5					10					15		
7923	ggg	ttg	ttt	cac	gtg	ata	ctt	ccg	cga	ggg	ttt	atc	ctc	gcg	aac	aat	96
7924	Gly	Leu	Phe	His	Val	Ile	Leu	Pro	Arg	Gly	Phe	Ile	Leu	Ala	Asn	Asn	
7925				20					25					30			
7927	att	acg	tgc	ggt	gaa	cgg	cag	cgg	ttt	ttt	gca	cac	act	tgg	ttc	gct	144
7928	Ile	Thr	Cys	Gly	Glu	Arg	Gln	Arg	Phe	Phe	Ala	His	Thr	Trp	Phe	Ala	
7929			35					40					45				
7931	gca	tct	gga	cgc	acg	tct	aag	act	tta	tac	gtg	tgg	gga	cgg	gta	ttt	192
7932	Ala	Ser	Gly	Arg	Thr	Ser	Lys	Thr	Leu	Tyr	Val	Trp	Gly	Arg	Val	Phe	
7933		50					55				60						
7935	caa	aac	acc	gac	ccg	ggc	cgc	ggg	gac	ggt	ccg	tcc	ggg	ccg	tgg	tcc	240
7936	Gln	Asn	Thr	Asp	Pro	Gly	Arg	Gly	Asp	Gly	Pro	Ser	Gly	Pro	Trp	Ser	
7937	65				70				75				80				
7939	gga	ctg	gcg	att	agt	ctg	cct	ctg	ttt	acc	aca	aat	gga	aaa	ttt	cat	288
7940	Gly	Leu	Ala	Ile	Ser	Leu	Pro	Leu	Phe	Thr	Thr	Asn	Gly	Lys	Phe	His	
7941				85					90				95				
7943	ccg	ttt	gat	gta	gtt	ata	ctc	aag	gcc	gat	acg	cct	gac	tct	gga	agc	336
7944	Pro	Phe	Asp	Val	Val	Ile	Leu	Lys	Ala	Asp	Thr	Pro	Asp	Ser	Gly	Ser	
7945			100					105					110				
7947	tcg	tgg	acc	gtg	aag	ttc	ttg	tat	atg	tca	tta	att	gcg	gct	tac	aga	384
7948	Ser	Trp	Thr	Val	Lys	Phe	Leu	Tyr	Met	Ser	Leu	Ile	Ala	Ala	Tyr	Arg	
7949		115					120					125					
7951	aac	gca	atg	cga	ggt	tta	aaa	gat	aaa	gtt	tcg	caa	tgt	acc	gat	gcc	432
7952	Asn	Ala	Met	Arg	Gly	Leu	Lys	Asp	Lys	Val	Ser	Gln	Cys	Thr	Asp	Ala	
7953		130					135					140					
7955	gcc	gtt	gac	ggt	gag	gtt	cat	cct	cta	acc	gtc	tta	aaa	gaa	gcg	ttg	480
7956	Ala	Val	Asp	Gly	Glu	Val	His	Pro	Leu	Thr	Val	Leu	Lys	Glu	Ala	Leu	
7957	145				150				155				160				
7959	gta	tca	ccg	gac	act	gct	acg	cga	ccc	gtg	tcc	gcg	tgc	aac	cct	cta	528
7960	Val	Ser	Pro	Asp	Thr	Ala	Thr	Arg	Pro	Val	Ser	Ala	Cys	Asn	Pro	Leu	
7961			165					170				175					
7963	cag	atg	ttg	acc	gga	ctc	tta	cag	tct	agg	gta	cgg	gac	gac	tac	gtg	576
7964	Gln	Met	Leu	Thr	Gly	Leu	Leu	Gln	Ser	Arg	Val	Arg	Asp	Asp	Tyr	Val	
7965			180					185				190					
7967	aca	cac	cac	cgt	gcg	ctc	gaa	cgc	cca	ggt	aat	gtg	agg	gga	caa	gta	624
7968	Thr	His	His	Arg	Ala	Leu	Glu	Arg	Pro	Gly	Asn	Val	Arg	Gly	Gln	Val	
7969		195					200					205					
7971	atc	gcc	ccg	acg	cgc	acc	gag	atg	cca	aac	gga	tcg	cca	agt	cgt	gta	672
7972	Ile	Ala	Pro	Thr	Arg	Thr	Glu	Met	Pro	Asn	Gly	Ser	Pro	Ser	Arg	Val	
7973		210					215					220					
7975	agg	ctt	gga	ttc	cgc	cct	ccc	aaa	caa	gcc	aac	tat	cca	aag	acg	tgg	720
7976	Arg	Leu	Gly	Phe	Arg	Pro	Pro	Lys	Gln	Ala	Asn	Tyr	Pro	Lys	Thr	Trp	
7977	225				230				235			240					
7979	gcg	cag	gcg	cgt	cac	gtt	ttc	tcg	tct	cgc	gca	tat	tac	gtg	tgc	gta	768
7980	Ala	Gln	Ala	Arg	His	Val	Phe	Ser	Ser	Arg	Ala	Tyr	Tyr	Val	Cys	Val	
7981			245					250				255					
7983	tat	gat	aac	gaa	gaa	cta	gat	acc	aag	tgg	cag	cgg	caa	gat	ccg	cgg	816

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:43

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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7984 Tyr Asp Asn Glu Glu Leu Asp Thr Lys Trp Gln Arg Gln Asp Pro Arg
7985                260                265                270
7987 ccg ttg ccg cta gat tgg tcc gat ccg gtc gcg tac ctg tta gag ggc      864
7988 Pro Leu Pro Leu Asp Trp Ser Asp Pro Val Ala Tyr Leu Leu Glu Gly
7989                275                280                285
7991 gat ttg ttt tta gga gcc aag cag aat gcg ttt gtc gat tct ata gaa      912
7992 Asp Leu Phe Leu Gly Ala Lys Gln Asn Ala Phe Val Asp Ser Ile Glu
7993                290                295                300
7995 aag acg tgc agg tgt cag aac tat acc att aag caa ttt ttt ccg gtt      960
7996 Lys Thr Cys Arg Cys Gln Asn Tyr Thr Ile Lys Gln Phe Phe Pro Val
7997 305                310                315                320
7999 ttg ata aat agg gac aac gaa aca gtc gac tta att aag gag cat ttt      1008
8000 Leu Ile Asn Arg Asp Asn Glu Thr Val Asp Leu Ile Lys Glu His Phe
8001                325                330                335
8003 ata gag gcg tgc ttc gtg att aga aac cag gtg tca gag agg agc gct      1056
8004 Ile Glu Ala Cys Phe Val Ile Arg Asn Gln Val Ser Glu Arg Ser Ala
8005                340                345                350
8007 tgg gta aag gcg gcg ctg ttt cgc aac gat agt aac acg tat tgg aag      1104
8008 Trp Val Lys Ala Ala Leu Phe Arg Asn Asp Ser Asn Thr Tyr Trp Lys
8009                355                360                365
8011 gat gtt ttg gga tta tgg gag cat ggg cct cat aag ctg ggt acg gct      1152
8012 Asp Val Leu Gly Leu Trp Glu His Gly Pro His Lys Leu Gly Thr Ala
8013                370                375                380
8015 ata aaa cta cca aca tcg gaa cct tgc aat gcc gac gta aac tgg agc      1200
8016 Ile Lys Leu Pro Thr Ser Glu Pro Cys Asn Ala Asp Val Asn Trp Ser
8017 385                390                395                400
8019 tgg ctc ctg tgt gac gag gat ata act cgg tca att agc ggg cag tct      1248
8020 Trp Leu Leu Cys Asp Glu Asp Ile Thr Arg Ser Ile Ser Gly Gln Ser
8021                405                410                415
8023 act gtt tgc tta gtt gtc tcg cct acc ctg acc gcc tgg ctg gtg ctc      1296
8024 Thr Val Cys Leu Val Val Ser Pro Thr Leu Thr Ala Trp Leu Val Leu
8025                420                425                430
8027 ccg ggg ggc ttt gtt att aaa ggc cgc tac gac cta tca agc gag gat      1344
8028 Pro Gly Gly Phe Val Ile Lys Gly Arg Tyr Asp Leu Ser Ser Glu Asp
8029                435                440                445
8031 tta atg ttt gtg gct tcg aga tat ggc cac cca gcg tcg tca cat tct      1392
8032 Leu Met Phe Val Ala Ser Arg Tyr Gly His Pro Ala Ser Ser His Ser
8033                450                455                460
8035 taa }

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E--> 8037 465
16028 <210> SEQ ID NO: 148
16029 <211> LENGTH: 675
16030 <212> TYPE: DNA
16031 <213> ORGANISM: Macaca mulatta rhadinovirus 17577
16033 <220> FEATURE:
16034 <221> NAME/KEY: CDS
16035 <222> LOCATION: (1)..(675)
16037 <400> SEQUENCE: 148
16038 atg agt tcc gga aaa cgt tta gtt gac gag ctg tgc gat tta gtt gtc      48

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:45

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

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16039 Met Ser Ser Gly Lys Arg Leu Val Asp Glu Leu Cys Asp Leu Val Val
16040 1 5 10 15
16042 tct tac ctg gga ccc tct gga atc tcc ctg gac ttg gag agg tgt cag 96
16043 Ser Tyr Leu Gly Pro Ser Gly Ile Ser Leu Asp Leu Glu Arg Cys Gln
16044 20 25 30
16046 gac ggg gct ccc gta tac gct aaa ggc ggc ggc gtc ccc gtg tgc acc 144
16047 Asp Gly Ala Pro Val Tyr Ala Lys Gly Gly Ala Val Pro Val Cys Thr
16048 35 40 45
16050 gtg cgc ctg cag cac ggc tgc gtc tat cat ctc gag ttt gtg tat aag 192
16051 Val Arg Leu Gln His Gly Cys Val Tyr His Leu Glu Phe Val Tyr Lys
16052 50 55 60
16054 ttt tgg ctc cac aaa cta gag aga ctg gcc tac ccg ttt gcc ccg tgt 240
16055 Phe Trp Leu His Lys Leu Glu Arg Leu Ala Tyr Pro Phe Ala Pro Cys
16056 65 70 75 80
16058 ttt gta att atc aac aac ggt ttg gcc acc acg ctg aaa tgt ttt ttg 288
16059 Phe Val Ile Ile Asn Gly Leu Ala Thr Thr Leu Lys Cys Phe Leu
16060 85 90 95
16062 tgt aag cca cgt gac gcc gat gcc cag ttt gga aaa aac ctg cct ata 336
16063 Cys Lys Pro Arg Asp Ala Asp Ala Gln Phe Gly Lys Asn Leu Pro Ile
16064 100 105 110
16066 aat tcg gac gtg tat ctt gag agg aac tcg tcc gtg tcc ctg ggc cag 384
16067 Asn Ser Asp Val Tyr Leu Glu Arg Asn Ser Ser Val Ser Leu Gly Gln
16068 115 120 125
16070 gac gat ttt atg aaa ttt aag gca cgt ctg gtt ttc tcc gga gac cta 432
16071 Asp Asp Phe Met Lys Phe Lys Ala Arg Leu Val Phe Ser Gly Asp Leu
16072 130 135 140
16074 aac gtt tac agc tcc atg gtc ata tgc cgc acc tac ttt acg gag cac 480
16075 Asn Val Tyr Ser Ser Met Val Ile Cys Arg Thr Tyr Phe Thr Glu His
16076 145 150 155 160
16078 cga cag gtt tta cag ttt ttg gtc gtg act cca aag agc gct aaa cgg 528
16079 Arg Gln Val Leu Gln Phe Leu Val Val Thr Pro Lys Ser Ala Lys Arg
16080 165 170 175
16082 tta aaa acc ctt ctt aga acg gtt ttt gcc ctg acg ggt cac tcc gac 576
16083 Leu Lys Thr Leu Leu Arg Thr Val Phe Ala Leu Thr Gly His Ser Asp
16084 180 185 190
16086 ggc ctc ggt ggc ttg agg cga acg ggc tcc gtg gcc cgc cct tcg ggg 624
16087 Gly Leu Gly Ala Leu Arg Arg Thr Gly Ser Val Ala Arg Pro Ser Gly
16088 195 200 205
16090 tcg gag ttg aag gat att ggg cgc gga gag cgt ggc ggc atg acc aat 672
16091 Ser Glu Leu Lys Asp Ile Gly Arg Gly Glu Arg Ala Ala Met Thr Asn
16092 210 215 220
16094 taa 675
E--> 16096 225
17824 <210> SEQ ID NO: 179
17825 <211> LENGTH: 1387
17826 <212> TYPE: DNA
17827 <213> ORGANISM: Macaca mulatta rhadinovirus 17577
17829 <400> SEQUENCE: 179
17830 cctagcggcc gggcccggag gcgcccggcc ggcgcgcgcg ccgggcccgc gccgccatct 60

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:45

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

```

17831 tgcgcccggg gcgagggtcc cccgcgcgcc ccccgggccc gcgcgcggg cgccgcggc 120
17832 ctcccccgcc tcccgccct ccgcccgcgc ggcccgggcc cgcggccgcc gcccccgcc 180
17833 gcccgcgcc gcgcgcggg ccgcttccg ttccgcgggc cgggggtccc gcggggggcc 240
17834 ggggcccgc ccgggtgcg ctccgcggg cccggccgac tcccgggagc gccccgggcc 300
17835 ggccgagccc ggcggcgcg cgcggcgac ccccccggc ccggggcccc acaagccgcg 360
17836 gcgcgcggct cccgatgcg ggcggcgcg gcccgcatg gcggtcctcc gccggcctcc 420
17837 cctccccac gccgcccga aaggtggtct ccgcgcgcc gggagggggg ccggggcccc 480
17838 gggcgccctc gcggggcccc gcgcggggcg cgaccgagg ccccgggaga acgggggatc 540
17839 gggaaaacgc gaggggagcg ggggacagg gacggcgtgt gcgtgctgt gagacaccg 600
17840 gtacggctgc ctgcctgctc gctggcctgc ttgctgagg gacagtaggc ctgcttgctc 660
17841 gctggcctgc ttgctgagg gacagtaggc ctgcttgctg aggggacagt aggcctgctt 720
17842 gctcgctggc ctgcttgctg aggggacagt agggctgctg gcttgctagt agggctgctc 780
17843 gctggcctgc ttgcttgctc gctggcctgc ttgcttgctc gctggcctgc ttgcttgctc 840
17844 gctggcctgc ttgcttgctc gctggcctgc ttgcttgctc gctggcctgc ttgcttgctc 900
17845 gctggcctgc ttgcttgctc gctggcctgc ttgctgagg gacagtaggc ctgcttgctt 960
17846 gctaagggga cggtagcct gcctgatggc ttgatagtag ggctgctggg ctgctagtag 1020
17847 ggctgctggg ctgctagtag ggctgctggg ctgctagtag ggctgctggg ctgctagtag 1080
17848 ggctcctggg ctgctagtag ggctgctggg ctgctagtag ggctcctggg ctgctagtag 1140
17849 ggctgctggg ctgctagtag ggctgctggg ctgctagtag ggctgctggg ctgctagtag 1200
17850 ggctgcctgc tggcttgctt gcttgcttgc tagtggggcc gcttgccctgc tactagggct 1260
17851 gctgtgcagc tgggagaaca gtaggggct gccggccagc tgcgtgcgag ggcgtccgag 1320
17852 ggccagacga ggacacggga cccgggcctc tccccgccc ggaccgcgg gcacccggcc 1380
17853 cagatct 1387

```

E--> 17856 1  
E--> 17859 117

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/831,000

DATE: 05/21/2001

TIME: 08:37:46

Input Set : A:\53683 seq listing.txt

Output Set: N:\CRF3\05212001\I831000.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:1172 M:254 E: No. of Bases conflict, LENGTH:Input:6800 Counted:68700 SEQ:1  
M:254 Repeated in SeqNo=1  
L:3738 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:12  
L:4118 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
L:4549 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:18  
L:5325 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:30  
L:6175 M:254 E: No. of Bases conflict, LENGTH:Input:705 Counted:2115 SEQ:38  
L:7501 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:48  
L:8037 M:254 E: No. of Bases conflict, LENGTH:Input:465 Counted:1395 SEQ:58  
L:8596 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:66  
L:9047 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:72  
L:10538 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:90  
L:10680 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:92  
L:11016 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:96  
L:11337 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:102  
L:11403 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:104  
L:13405 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:128  
L:13729 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:132  
L:13879 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:134  
L:14641 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:140  
L:15803 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:144  
L:16096 M:254 E: No. of Bases conflict, LENGTH:Input:225 Counted:675 SEQ:148  
L:16516 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:154  
L:16622 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:156  
L:17856 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:1387 SEQ:179  
M:254 Repeated in SeqNo=179